

INITIAL STUDY

PROJECT TITLE: Chevron Products Company Post-closure and Operating Permit Renewal		CALSTARS CODING: 300032-50
PROJECT ADDRESS: 324 West El Segundo	CITY: El Segundo	COUNTY: Los Angeles
PROJECT SPONSOR: Robert Orinion	CONTACT: Robert Orinion	PHONE: (310) 615-4147

APPROVAL ACTION UNDER CONSIDERATION BY DTSC:

- | | | | |
|--|--|--|---------------------------------------|
| <input type="checkbox"/> Initial Permit Issuance | <input checked="" type="checkbox"/> Permit Renewal | <input type="checkbox"/> Permit Modification | <input type="checkbox"/> Closure Plan |
| <input type="checkbox"/> Removal Action Workplan | <input type="checkbox"/> Remedial Action Plan | <input type="checkbox"/> Interim Removal | <input type="checkbox"/> Regulations |
| <input type="checkbox"/> Other (specify): | | | |

STATUTORY AUTHORITY:

- ☒ California H&SC, Chap 6.5 ☐ California H&SC, Chap 6.8 ☐ Other (specify):

DTSC PROGRAM/ ADDRESS: 1011 North Grandview Ave. Glendale, CA	CONTACT: Richard Allen	PHONE: (818) 551-2924
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PROJECT DESCRIPTION: This Project is the renewal of existing Post-Closure and Operating Permit for Chevron Products Company pursuant to the Health and Safety Code, section 25200. The owner of the facility is Chevron U.S.A. Inc. and the operator is Chevron Products Company. The entire Chevron El Segundo refinery is one-square mile. The Los Angeles Regional Water Quality Board, Los Angeles Region oversees other activities such as free-product removal. This project involves the former landfarm, an impoundment that has been closed and is now subject to post-closure care and operating permit for the Hazardous Waste Storage and Treatment Facility and PCB Storage Building. These units occupy approximately 11 acres of the 640 acres that make up the entire refinery. Figure 1 is a Regional Location Map. Figure 2 is a site location map. Figure 3 is a plot plan of the operating Hazardous Waste Storage and treatment Facility (HWSTF) and the PCB storage building. Figure 4 shows the location of the landfarm within the refinery boundary, Figure 5 is a plot plan of the landfarm, and Figure 6 is a Zoning Map of the City of El Segundo.

PROJECT DESCRIPTION (cont): Renewal of existing Post-Closure and Operating Permit for Chevron Products Company (Chevron). The entire Chevron El Segundo refinery is one-square mile. The Los Angeles Regional Water Quality Board, Los Angeles Region oversees other activities such as free-product removal.

History: Prior to El Segundo's incorporation in 1917, this area was part of "Rancho Sausal Redondo" ("Ranch of the Round Clump of Willows"), a rancho with a land mass of nearly 25,000 acres which extended from the areas as far west of what is now Playa del Rey, as far east as Inglewood, and as far south as Redondo Beach. The land consisted of wheat and barley fields on which cattle and sheep grazed.

In May 1911, five men representing the Standard Oil Company arrived here: Richard J. Hanna and J.E. Howell of the Eclipse refinery of Franklin, Pennsylvania and John Black, Henry Foster and William Rheem from the Standard Oil refinery in Point Richmond, a city 18 miles east of San Francisco. They were surveying the area as a potential site for their next oil refinery. What was required was an area adjacent to the seashore so their tankers could have appropriate access. The undeveloped nature of the site appealed to them because land costs had to be kept to a minimum. Also, the site had to be close to populated areas so it could attract enough employees. The "clump of willows" was just what Mr. Hanna's team was looking for.

Lastly, this new site needed a name. Richard Hanna's wife, Virginia, deemed this expanse as "El Segundo", (Spanish for "the second one,") because the site was to be Standard Oil's second oil refinery in California (The Point Richmond refinery was already christened as "El Primero"). Sometime later, a group of proud but unknown citizens had nicknamed it "El Segundo a nada" (Spanish for "second to none")

Standard Oil bought 840 acres of this land on June 11, 1911. The refinery opened for business, just five and a half months later, on November 27.

This project involves the renewal of an existing permit for Post-Closure Care of the former landfarm. This care is groundwater monitoring, soil pore gas monitoring, soil pore liquid monitoring and monthly inspections of the landfarm cap. These activities are now being carried out and this permit will continue these activities as before. There is one change. The frequency of groundwater sampling will be reduced from quarterly to semi-annually, pursuant to a memorandum for DTSC's Office of Legal Services dated September 13, 2004. The operating permit portion of the permit is for the Hazardous Waste Treatment and Storage Facility and the Polychlorinated Biphenyl (PCBs) building. This renewal will not result in any changes to these current operations.

The former Landfarm covers (Figure 5) an area of 9.8 acres. This unit operated from 1979 until 1987. In 1981 an interim status document was issued for this unit. In 1987 when Chevron/Texaco decide not to use this unit they began closure. Because Chevron was unable to remove all contaminated soil, a cap was placed over the unit and it was subject to Post-Closure Care. Closure was completed in 1992 and the landfarm was certified closed by DTSC in 1993. In 1994 a post closure permit was issued for this unit as well as the operating HWSTF and the PCB storage building. This Permit expired on May 2, 2004 and is being renewed.

Project Description: This post closure portion of the permit requires Chevron to sample groundwater at 8 groundwater monitoring wells. These wells will be sampled every six months. The groundwater will be tested at an off-site California Certified Laboratory for volatile organic compounds (VOCs), Semi-volatile organic compounds (VOCs), heavy metals and pesticides. Results for these analysis will be used to determine if the landfill contaminating groundwater.

This permit will also require Chevron to sample pore-liquids every six months to be analyzed for VOCs, SVOCs, and heavy metals. These results will determine if water is going through landfarm cap.

Finally, landfill gas will be sampled at sampling locations along the edge of the cap and analyzed to determine if gases for the landfarm are leaving the landfarm.

The cap itself will be inspected for cracking and any other holes. This is to monitor the integrity of the landfarm cap.

All of these above measures are for post closure care of the landfarm and if any increases are detected in either the soil gas, pore-liquid or groundwater, further measure will be taken to contain any hazardous substances.

The operating portion of the permit allows Chevron to operate the HWSTF and PCB Storage building. The HWSTF (Figure 3) is a large concrete-surfaced area which is divided in two phases. Phase I measures 135 feet by 80 feet. This portion covers about 12,000 square feet. Phase II measures 175 feet by 135 feet and it covers 23,825 feet. Both phases are surrounded by 3 foot high containment berm. This area has a capacity of eight 4,000-gallon bins (solid waste with free liquids); twenty-five 650-gallon flo-bins (solid waste with free liquids); six-hundred 55-gallon drums (liquid Waste); and, twenty-four Hundred 55-gallon drums (solid waste). The total allowable capacity is 213,250 Gallons. The waste types are: miscellaneous aqueous waste (acid, caustic, containing metals), listed refinery waste, catalysts, non-listed oily waste, hazardous debris, and asbestos waste. The treatment conducted at this unit is pH adjustment and these units consist of 2 650-gallon poly tanks as associated piping and pumps.

The PCB building (Figure 3) is a steel building which is 24 by 36 feet in size. This building has a concrete floor surrounded by a 8-inch high curb. The maximum permitted capacity is 3,414 gallons. This may be consist of either sixty-two 55-gallon drums or 690 five-gallon pails, or a combination thereof not to exceed 3,414 gallons.

Chevron collects various hazardous wastes used in their daily operations, seals these waste in containers and storage them for future off site transfer and disposal. Three containers sizes are used. These are 20 cubic yard roll-off bins, 55-gallon drums and 5-gallon pails. Of these nearly all waste is stored in the drums. Examples of the waste are silver photograph solution, automotive oil filters, crude oil and refinery product sample from chevron on site laboratory and oily rags. Chevron makes every effort to recycle as much as possible to reduce this waste.

stream. Although this has the capacity for several hundred drums, usually only up to 20 drums are stored at the HWSTF.

The only treatment permitted and conducted at the HWSTF is pH adjustment. Various oil refinery operations require the use of acids and caustics. This process involves mixing an acidic liquid with a caustic liquid or a caustic liquid with an acid to create a neutral solution. A neutral solution, provided there are no other contaminants, can be disposed of as non hazardous waste. When this treatment is conducted, the operator wears all necessary personal protective equipment as specified in Chevron's Health and Safety Plan.

The PCB storage building is a central collection point for on-site generated PCB wastes. This is a steel building with curbed concrete slab foundation that serves as secondary containment. Polychlorinated Biphenyls were once used extensively as cooling oil in electric transformers. This material was favored because of its dielectric or electrical insulating properties. Over 20 years ago it was banned because it is also very carcinogenic. Most of the transformers and electrical equipment on site now use mineral oil, a much safer substance. However, infrequently a transformer or soil contaminated with PCB is located, cleaned up and the residual waste is stored in this building to await transfer and disposal off site to a Class I Landfill. When these wastes are moved, the operator wears all necessary personal protective equipment as specified in Chevron's Health and Safety Plan.

ENVIRONMENTAL IMPACT ANALYSIS:

1 Aesthetics

Description of Baseline Environmental Conditions: The Chevron refinery is located in an area of mixed uses, with industrial, recreation, residential, and commercial uses nearby. The predominant adjacent land uses include: Dockweiler State Beach and Manhattan Beach and the El Segundo Generating Station to the west; a residential area of Manhattan Beach to the south; a golf course, a commercial and light industrial corridor to the east; and commercial and residential areas of El Segundo to the north. Some of these areas, particularly those associated with the beaches and Santa Monica Bay, are of scenic value.

Analysis as to whether or not project activities would:

- a. Have a substantial adverse effect on a scenic vista

Impact Analysis: Groundwater, soil-gas and soil pore-liquid monitoring wells are located both on, all activities such as sampling and water level sounding would occur on-site. There would be no adverse effect on any scenic vista because of these activities.

Conclusion: Although this area is near the Pacific Ocean and therefore beaches, this area is commercial and industrial and would not be considered a scenic vista; therefore, there is no impact.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway

Impact Analysis: There are no rock outcroppings, few trees and none of any scenic value, and no historic buildings in this area. This is an industrial area and not a scenic resource.

Conclusion: There is no possibility of any damage to a scenic resource.

- ☐ Potentially Significant Impact

- ☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- c. Impact Analysis: The activities associated with this project will not degrade the existing visual character or quality of the site and its surroundings.

Conclusion: This project will not have any effect of the site or its surroundings.
Impact Analysis: Same as a

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d. Create a new source of substantial light of glare that would adversely affect day or nighttime views in the area.

Impact Analysis: There is no permanent construction or installation of lighting fixtures required for this project. Moreover, all project activities are planned for daylight hours therefore no artificial light is necessary.

Conclusion: The project activities will not add any new light or glare.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006.

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Kraus, South Coast Air Quality Management District, September 29, 2005.

WWW.elsegundo.org

2. Agricultural Resources

Description of Baseline Environmental Conditions: The Chevron refinery is located in an area of mixed uses, with industrial, recreation, residential, and commercial uses nearby. The predominant adjacent land uses include: Dockweiler State Beach and Manhattan Beach and the El Segundo Generating Station to the west; a residential area of Manhattan Beach to the south; a golf course, a commercial and light industrial corridor to the east; and commercial and residential areas of El Segundo to the north.

Analysis as to whether or not project activities would:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

Impact Analysis: The proposed project involves activities within the confines of an existing refinery that are consistent with heavy industrial zoning. No agricultural resources exist at or in the vicinity of the Chevron refinery and no new land will be acquired as part of the proposed project. Further, the proposed project will not convert Farmland (as defined above) to non-agricultural use or involve other changes in the existing environment that could convert Farmland to non-agricultural use.

Conclusion: There will be no conversion of farmland to any other purpose as a result of this project.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated

- ☐ Less Than Significant Impact
☒ No Impact

b. Conflict with existing zoning or agriculture use, or Williamson Act contract

Impact Analysis: Land in the vicinity of the refinery is not currently zoned for agricultural use. The proposed project does not conflict with an existing agricultural zone or Williamson Act contracts and does not include converting agricultural land for non-agricultural uses.

Conclusion: There will be no impact.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses

Impact Analysis: Land in the vicinity of the refinery is not currently zoned for agricultural use. The proposed project does not conflict with an existing agricultural zone or Williamson Act contracts and does not include converting agricultural land for non-agricultural uses.

Conclusion: There will be no conversion of agricultural land to non-agricultural land.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Krause, South Coast Air Quality Management District, September 29, 2005.

<http://www.consrv.ca.gov/DLRP/lca/> (the Williamson Act Program)

3. Air Quality

Description of Baseline Environmental Conditions: The Chevron El Segundo Refinery activities in the refining of crude oil into gasoline and other petroleum products. These activities have the potential to cause degradation of the air quality. For this reason all refining activities are conducted under permits issued by the South Coast Air Quality Management District (SCAQMD). The criteria pollutant regulated by the SCAQMD are lead (Pb), Sulfur Dioxide (SO₂), Carbon Monoxide (CO), Ozone (O₃), fine particulate matter (PM₁₀), sulfate and visual range. Chevron has not exceeded the respective limits allowed by the AQMD for these compounds and criteria.

Soil gas sampling associated with the landfarm environmental monitoring include sampling for benzene, ethylbenzene, formaldehyde, formic acid, isobutanol, methane, methyl ethyl ketone, toluene and xylenes. There is not soil gas or air monitoring program for the HWSTF and the PCB storage building.

Analysis as to whether or not project activities would: The activities that are currently conducted at the Landfarm and the HWSTF/PCB storage building will not contribute to or degrade air quality. All activities will be performed pursuant to the post-closure permit and this project is a continuation of the previous 10-year sampling program. There are no changes to the air or soil gas programs from the previous permit.

a. Conflict with or obstruct implementation of the applicable air quality plan

Impact Analysis: This project will not obstruct implementation of the applicable air quality plan. There may actually be a decrease in emissions although ever so slight because groundwater will only be sampled semi-annually instead of quarterly.

Conclusion: No impact.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Impact Analysis: Combined exhaust from internal combustion engines used during the course of post-closure activities will be no greater than three motor cars. This will have negligible effect and neither violates any air quality standard nor contributes substantially to an existing or projected violation.

Conclusion: There will be no violation or contribution to any air quality violation from the project.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Impact Analysis: There will be no cumulative considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard because this project is a continuation of unchanging, ongoing activities and if nothing is change there will be no increase.

Conclusion: This will have no impact.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d. Expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis: All other individuals are day workers. No planned post-closure activities would increase pollutant concentrations. Previous investigations have indicated that soil is contaminated and ground water is polluted. The proposed project is intended to evaluate the cleanup these media as necessary to meet post-closure performance standards. These affected media are not known to have substantially affected air quality. The proposed post-closure activities of sampling and the operating permit for the HWSTF pose no threat of increasing pollutant concentrations because all material is containerized. The small amount of material, if contaminated when dispersed in the surrounding area will be less than one part per trillion. Additionally, there are no hospitals or other sensitive receptors nearby.

Conclusion: No sensitive receptors will be exposed to substantial pollutant concentrations.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- e. Create objectionable odors affecting a substantial number of people.

Impact Analysis: Proposed project will not cause objectionable odorous emissions that would noticeably change the nature and intensity of odors emitted at the refinery. Sulfur compounds (e.g., hydrogen sulfide) are the most noticeable odor source in refinery operations. The proposed project would not alter the methods or equipment for handling sulfur and sulfur-bearing compounds at the refinery. The sulfur content of exude oil is not related to its density; a particular heavy crude oil may have a lower or higher sulfur content than a particular light crude oil. The sulfur-bearing materials are currently and will continue to be processed in the Sulfur Recovery Units where they are converted to elemental (liquid) sulfur. Elemental sulfur does not emit appreciable odor.

The proposed project will be required to comply with all relevant source-specific rules for existing equipment (SCAQMD Regulation XI source specific rules); all relevant prohibitory rules (SCAQMD Regulation IV rules); all rules governing installation of new, modified, or relocated equipment (SCAQMD Regulation XIII new source review and DRECLAIM rules); etc. thus, the proposed project is not expected to diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutants.

Conclusion: This project will have no impact because it will not create any odors.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

7 Result in human exposure to Naturally Occurring Asbestos (see also Geology and Soils, 1.)

Impact Analysis: The geologic nature of the site is such that naturally occurring asbestos can be eliminated as a consideration. The site is underlain by alluvial deposits. Asbestos naturally occurs in areas adjacent to serpentinite bodies. There are no such bodies within 100 miles of the facility.

Conclusion: There is no possibility of encountering naturally occurring asbestos at this location.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Krause, South Coast Air Quality Management District, September 29, 2005

South Coast Air Quality Management District, 2003, Final 2003 Air Quality Management Plan

4. Biological Resources

Description of Baseline Environmental Conditions: The proposed project will be located within the existing boundaries of the Chevron El Segundo Refinery, which is zoned and has been used for heavy industrial purposes since 1911, and has already been disturbed. The refinery site does not support riparian habitat, federally protected wetlands (as defined by § 404 of the Clean Water Act), or migratory corridors. With the exception of some decorative landscaping, plants are removed from operating areas for safety reasons. There are three special-status species that have been reported in the immediate vicinity of the Refinery: two animal species (the El Segundo blue butterfly and the Pacific Pocket Mouse) and one plant species (the Beach Spectaclepod). Two other animal species, the Henna's Eucosman Moth and Lange's El Segundo Dune Weevil are also found near El Segundo, directly west of Los Angeles International Airport, approximately one mile to the north of the Chevron/Texaco refinery.

Analysis as to whether or not project activities would:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service

Impact Analysis. The proposed project would be located within existing boundaries of the Chevron El Segundo Refinery, which is zoned and has been used for heavy industrial purposes since 1911, and has already been disturbed. The refinery site does not support riparian habitat, federally protected wetlands (as defined by § 404 of the Clean Water Act), or migratory corridors. With the exception of some decorative landscaping, plants are removed from operating areas for safety reasons. There are three special-status species that have been reported in the immediate vicinity of the Refinery: two animal species (the El Segundo blue butterfly and the Pacific pocket mouse) and one Plant species (the beach spectaclepod).

The El Segundo Blue Butterfly (*Euphilotes battoides allyni*) is a small (wing span of less than one inch), brightly colored butterfly that historically has been found in the El Segundo sand dunes of Los Angeles County. Because of extensive habitat loss, degradation, and fragmentation due to urban development, the butterfly's habitat has been reduced to two areas: sand dunes near the Los Angeles International Airport, which contains the largest population of the butterfly, and two acres at the butterfly sanctuary that was created within the property of the Chevron El Segundo Refinery. The El Segundo blue butterfly was listed as an endangered species by the federal government in 1976. The butterfly was discovered on an undeveloped portion of the refinery property in 1975, and, shortly thereafter, the area where the butterfly was found in the northwest portion of the refinery property was voluntarily fenced by Chevron to protect the butterfly's habitat and the coastal buckwheat plant (*Eriogonum parvifolium*), upon which the butterfly feeds during all stages of its life cycle.

Because the buckwheat plant at the refinery's butterfly sanctuary has been threatened by various invasive species and annual grasses (e.g. tumbleweeds, rye grass, and ice plant), efforts have been made on an ongoing basis since the early 1980s to inhibit weed growth and stimulate buckwheat. Approximately 5,000 buckwheat plants have been transplanted at the refinery since 1983 (Chevron 2005). In the mid 1980s, there were only about 400 of these butterflies at the Chevron butterfly sanctuary; at present there are approximately 10,000 (Chevron 2005b). The butterfly population on Los Angeles International Airport property also has increased, from a population of approximately 500 in 1985 to between 40,000 and 50,000 in 2001 (City of Los Angeles 2001).

The Pacific pocket mouse (*Perognathus longimembris pacificus*) is a small brownish rodent that lives in fine-grained, sandy areas (coastal strand, coastal dunes, coastal sage scrub, and river alluvium) in the immediate vicinity of the Pacific Ocean in southwestern California (SCAQMD 2001). Historically, the mouse's range extended from Los Angeles County south to the Mexican border, including portions of the Chevron El Segundo Refinery property. Only a few known populations remain, and they are in Orange County (Dana Point) and San Diego County (Camp Pendleton). The Pacific pocket mouse was last reported in the area of the Chevron refinery in 1938, and, thus, is not expected to exist at the refinery at present.

The beach spectaclepod (*Dithyrea maritime*) is a small low-growing perennial herb. The species is native to California and occurs in foredunes, active sand, and dune scrub from San Luis Obispo south to Baja California. The beach spectaclepod is considered extremely rare by the California Native Plant Society; it is listed as threatened by the State of California and as a Species of Concern by the federal government. The only reported occurrence for this plant at the refinery site was in 1884, and the species is not expected to exist at the refinery at present (SCAQMD 2001). The proposed project activities will take place at an existing refinery, whose active areas have been highly disturbed and contain no significant biological resources. No impacts are expected to special status species. The Pacific pocket mouse and beach spectaclepod have not been sighted at the refinery in decades (since 1938 for the mouse and since the late 19 century for the spectaclepod).

The refinery area population of the federally endangered El Segundo blue butterfly has increased substantially over the past 20 years, due to the existence of and habitat improvements at the refinery butterfly sanctuary. These increases in blue butterfly population have occurred while refinery operations have continued nearby. The nearest location to the butterfly sanctuary where proposed project activities are expected (the No. 4 Crude Unit) is over 3,000 feet from the sanctuary, with other refinery equipment located in closer proximity. The proposed project would not be expected to have significant adverse impacts on the El Segundo blue butterfly.

Conclusion: In summary, the proposed project would have no significant impacts on special-status animal or plant species.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact

☒ No Impact

- d. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact Analysis: There will be no impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Conclusion: There will be no substantial adverse impact as a result of this project.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- e. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact Analysis: There are no wetlands within a mile of the Facility and the project does not include direct removal, filling, hydrological interruption of any wetlands.

Conclusion: There will be no effect on any wetlands.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- f. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact Analysis: All activities will be confined to the Facility, which is in an industrial urban setting with no wildlife or fish nearby. No run-off is anticipated from any of the site post-closure activities.

Conclusion: This project will not affect any fish or wildlife.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- g. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact Analysis: Because the proposed project will occur entirely within the boundaries of the refinery, the project will not conflict with local policies or ordinances protecting biological resources nor local, regional, or state conservation plans of any type.

Conclusion: This project does not involve any activities which would any biological resource.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- h. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact Analysis: The project site location is not located within or named a part of any known habitat conservation plan or any sort of natural community conservation plan is known that would be affected by the closure activities. If a conservation plan should be adopted prior to the start of work, any potential conflicts will be eliminated.

Conclusion: There will be no conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Krause, South Coast Air Quality Management District, September 29, 2005

California Natural Diversity Database, Biogeographic Data Branch, Department of Fish and Game, Version Date: October 3, 2006

5. Cultural Resources

Description of Baseline Environmental Conditions: CEQA Guidelines 15064.5 states that resources listed in the California Register of Historical Resources or in a local register of historical resources are considered "historical resources." A records search was conducted at the South Central Coastal Information Center (SCCIC) in August 2006 of all recorded archaeological sites and survey reports within a 0.5 mile radius of the Chevron El Segundo Refinery (see Appendix A). Federal state and local historic listings were reviewed along with historic maps. In addition, this background research was supplemented by an internet search for relevant historical information. The research revealed that the listings of the National Register of Historic Places, California Historical Landmarks, California State Historic Resources Inventory, California Points of Historical Interest, and Los Angeles County Landmarks include no properties within the refinery. One historic site, P-186856, is recorded at the outer edge of the 0.5-mile radius. Because the proposed project activities will occur entirely within the refinery boundaries, site P-186856 would not be directly or indirectly impacted by the proposed project. Based on the results of these records searches, the proposed project will not cause an adverse change in the significance of a resource listed in the California Register of Historical Resources or in a local register of historical resources.

Additionally, CEQA Guidelines 15064.5(a)(3) states that "generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing in the California Register of Historical Resources including the following:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (B) Is associated with the lives of persons important in our past;
- (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
- (D) Has yielded or may be likely to yield information important in prehistory or history.

Analysis as to whether or not project activities would:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5

Impact Analysis: Because all current activities have are being conducted on site and no historical resource is located on site, this project will not have any effect on any historical resource.

Conclusion: This project will have no effect on any historical resource as defined in 15064.5

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5

Impact Analysis: Same as item a above

Conclusion: Same as item a above

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- c Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

Impact Analysis: This project will not result in the destruction of any unique paleontological resource or site or unique geologic feature because this project does not involve the disturbance of the ground surface

Conclusion: There is no possibility of the destruction of any unique paleontological resource or site or unique geologic feature occurring

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d Disturb any human remains, including those interred outside of formal cemeteries

Impact Analysis: There will be no disturbance of the ground surface and, therefore no possibility of disturbing buried human remains.

Conclusion: This project will not disturb any human remains

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006
CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Krause, South Coast Air Quality Management District, September 29, 2005

WWW.elsegundo.org

6. Geology and Soils

Description of Baseline Environmental Conditions: The proposed project activities will be conducted in an area of known seismic activity. Approximately 35 active faults are known to exist within a 50-mile radius of the refinery. Of primary concern are two active faults: the Newport-Inglewood Fault, approximately five miles north of the refinery, and the Palos Verdes Fault, approximately 3.8 miles south of the site.

The Newport-Inglewood Fault Zone represents the most significant source of strong seismic ground shaking at the refinery. The Newport-Inglewood Fault Zone extends more than 40 miles from Newport Bay to Beverly Hills and trends to the northwest. The greatest concentration of seismic events on the Newport-Inglewood Fault Zone is

related to the 1933 Long Beach earthquake and its aftershocks. The fault is considered capable of generating a 6.9 magnitude earthquake.

Another significant fault in the immediate refinery vicinity is the Palos Verdes Fault Zone. This fault extends approximately 72 miles from Santa Monica Bay south to Lausen Knoll in the southern San Pedro Channel. The Palos Verdes fault is considered capable of a T1 magnitude earthquake. As cited in the Final EIR for the Chevron-El Segundo Refinery California Air Resources Board (CARB) Phase 3 Clean Fuels Project, evaluations by the California Division of Mines and Geology (CDMG) indicate that there is a 10 percent probability of earthquake ground motion exceeding 0.45g at the refinery site over a 50-year period (SCAQMD 2001).

Although within a seismically active area, according to the Alquist-Priolo Earthquake Fault Zoning Maps and Fault Activity Map of California (1994), the El Segundo Refinery is not located on a fault trace that would define the site as a special seismic study zones under the Alquist-Priolo Act. Thus, the risk of earthquake-induced ground rupture is considered less than significant.

Where appropriate, the project design will be reviewed and approved by a civil or structural engineer with training in design methods to prevent damage from a possible earthquake. With adherence to proper design and construction practices, no significant impacts from seismic ground shaking would be expected.

Liquefaction is a mechanism of seismic ground failure in which earthquake-caused ground motion causes loose, water-saturated, cohesionless soils to be transformed to a liquid state. The refinery site has not been identified as an area where liquefaction is considered a significant potential risk (SCAQMD 2001). The site also is not considered to be an area with the potential for permanent ground displacement due to earthquake-induced landslides or due to heavy precipitation events (SCAQMD 2001).

Analysis as to whether or not project activities would:

- a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42)
 - Strong seismic ground shaking
 - Seismic-related ground failure, including liquefaction
 - Landslides

Impact Analysis: This project will not cause a rupture at a known earthquake fault, cause strong seismic ground shaking, cause seismic-related ground failure, including liquefaction or cause a landslide because is a continuation of on-going activities that have been conducted for 10 years. Activities do not involve the disturbance of surface soil or subsurface soil.

Conclusion: This will not happen, as none of these activities involve construction that may be affected by seismic activities.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b. Result in substantial soil erosion or the loss of topsoil.

Impact Analysis: Erosion from wind or water could not occur during the proposed project as soils are not exposed at any of the locations.

Conclusion: For this reason, potential erosion impacts are expected to be no impact.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Impact Analysis: The refinery site is not located in area of unstable geologic or soil conditions. The refinery site has not been affected in the past by ground subsidence and is not expected to experience significant subsidence in the future. As discussed under item a above, the refinery site is not in an area of significant liquefaction or landslide risk.

Conclusion: All soil that the activities are conducted on will be stable and no landslide, lateral spreading, liquefaction, subsidence or collapse would occur.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Impact Analysis: The uppermost four to 10 feet of soil at the refinery generally is composed of granular, alluvial materials and sandy silt artificial fills. These materials do not tend to show significant soil expansion or be considered an expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994). The proposed project would not be expected to result in significant risks due to expansive soils. Additionally, this project will not require any contact with site soil.

Conclusion: The proposed project will not involve any expansive soils because all soil underlying the site is dune sand and therefore not expansive.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- e Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of water.

Impact Analysis: Because wastewater associated with the proposed project will be collected and transported off site, soils at the refinery site are not required to be usable to support septic tanks or other alternative wastewater disposal systems. Furthermore, no septic tanks or alternative waste water disposal systems are used in the City of El Segundo.

Conclusion: This is not an impact because this facility utilizes city sewers.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- f Be located in an area containing naturally occurring asbestos (see also Air Quality, f.)

The geologic nature of the site is such that naturally occurring asbestos can be eliminated as a consideration. The site is underlain by alluvial deposits. Asbestos naturally occurs in area adjacent to serpentinite bodies. There are no such bodies within 100 miles of the facility

Conclusion: There is no possibility of encountering naturally occurring asbestos at this location

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A Krause, South Coast Air Quality Management District, September 29, 2005.

Division of Mines and Geology Special Publication 42

WWW elsegundo.org (see municipal code and building and safety link)

7. Hazards and Hazardous Materials

Description of Baseline Environmental Conditions: The activities are a continuation of on-going environmental monitoring and inspections of the closed Landfill unit and the operating HWSTF and PCB storage building. The landfarm is a closed hazardous waste unit with approximately 58,000 tons of refinery waste left in-place and capped with clay and asphalt. Hazardous material resulting from this unit are groundwater and pore-liquid samples for analysis. These samples are disposed of by the laboratory once the analysis has been completed. There is one change from the previous permit and that is that the frequency of groundwater sampling will be conducted semi-annually rather than quarterly. A determination was made that groundwater quality was stable and such a change at this time is prudent.

The HWSTF and the PCB building may at various times contain hazardous materials. The total capacity for the HWSTA is 213,250 gallons. In any year fewer than 2,500 gallons of hazardous waste are stored and fewer than 1,000 gallons of hazardous waste are treated. All treatment results in hazardous waste being converted to non-hazardous waste and being disposed to a POTW. Hazardous materials from all areas of the refinery are collected here for off-site transport and disposal. These materials are nearly always containerized in 55-gallon drums, although 5-gallon pails and 20-cubic yard roll-off bins are permitted. Hazardous materials include such items as expired paints, oil filters, and photographic developing fluid. When possible materials are recycled and e-waste is handled separately.

Analysis as to whether or not project activities would:

- a Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials

Impact Analysis: This will not occur because all efforts to transport this material will be completed by a licensed waste hauler. No use of hazardous materials other than handling for off-site transport occurs as a result of this project and all disposal activities for hazardous waste are conducted at a class I landfill, not operated by Chevron.

Conclusion: There would be no significant hazard to the public or environment as a result of the project.

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

- b Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact Analysis: All hazardous materials are transported by licensed hazardous waste transporters and properly containerized. There would be no significant hazard.

Conclusion: Care in transporting all hazardous material will cause no significant hazard

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- c Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school

Impact Analysis: No hazardous material will be handled or will any hazardous emissions be emitted within one-quarter mile of a school

Conclusion: There are no schools located with ¼ mile of the proposed hazardous transport truck route

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to public or the environment

Impact Analysis: The Chevron Facility is listed on the Cortese list as compiled by Government Code Section 65962.5. This analysis is being prepared to comply with the provisions of the Cortese list.

Conclusion: Although this project is on the Cortese list the project will not create a significant hazard to public or the environment

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- e Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan

Impact Analysis: This project will not impair or physically interfere with any emergency plan

Conclusion: No adopted emergency response plan or emergency evacuation plan will be interfered with

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A Krause, South Coast Air Quality Management District, September 29, 2005

U.S. Environmental Protection Agency Test Methods for Evaluating Solid Waste. SW846, Third Edition, Update III Revision 2, December 1996

8. Hydrology and Water Quality

Description of Baseline Environmental Conditions: The Chevron El Segundo Refinery is located on a one-square mile parcel bordering the Pacific Ocean. Much of the groundwater underlying the Chevron refinery is impacted by floating petroleum. The RWQCB is overseeing the extraction of this free product and overall cleanup of groundwater. The upper-most saturated zone is not used for any domestic purposes. Lower aquifers are used and are part of the barrier project, a system of injection wells designed to prevent salt water intrusion from the Pacific Ocean.

Groundwater is impacted under the HWSTF and the PCB Storage Building. These facilities are not subject to environmental monitoring. All environmental monitoring in this area of the refinery is conducted by the RWQCB. The proposed project will not involve increased water consumption nor increased wastewater generation, thus, the potential does not exist for significant adverse impacts on both water supplies and water quality. Under the landfarm, where DTSC is overseeing the monitoring of groundwater quality there is the possibility of releases from impounded waste, although no release of significant has been detected in groundwater.

Analysis as to whether or not project activities would:

- a. Violate any water quality standards or waste discharge requirements

Impact Analysis: There are no waste discharge requirements associated with this project. This project will have no effect on water quality because no change will occur in current practices. The groundwater will continue to be sampled as before.

Conclusion: No water quality standards have been violated. Waste discharge requirements do not apply to this project.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)

Impact Analysis: This will not happen because no significant amount of water will be pumped from the groundwater wells that are part of this post-closure project.

Conclusion: No large quantities of water will be pumped as a result of this project.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site

Impact Analysis: There will be no change because no soil will be moved. All areas in the project area are paved.

Conclusion: This will not occur because no change in the land surface or cover is planned.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site

Impact Analysis: No change in topography will occur as a result of this project

Conclusion: No change to drainage will occur

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- e Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff

Impact Analysis: see c above

Conclusion: No Impact

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- f Otherwise substantially degrade water quality

Impact Analysis: No activities required by this permit will degrade water quality. Groundwater will be sampled and any left over will be properly disposed of by a licensed waste hauler

Conclusion: There will be no impact

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- g Place within a 100-year flood hazard area structures which would impede or redirect flood flows

Impact Analysis: The Part B Permit Application contains floodplain maps indicating no portion of the Chevron Refinery is located in a 100-year flood plain. All activities will be conducted on site

Conclusion: This will no have an impact

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- h Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam

Impact Analysis: There are no dams or levees near the refinery

Conclusion: There is no threat to this facility from dams or levees

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- i Inundation by seiche, tsunami or mudflow

Impact Analysis: The entire refinery is approximately 80 feet above sea level, and on level ground. The project is not located where sieches, tsunamis or mudflows would impact any activities conducted at the landfarm or the HWSTF and PCB Storage Building

Conclusion: There will be no inundation by sieche, tsunami or mudflow

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Krause, South Coast Air Quality Management District, September 29, 2005

E-mail from Roger Hann, Chevron regarding onsite water recycling October 23, 2006

U.S. Environmental Protection Agency Methods for Chemical Analysis of Water and Waste, Environmental Monitoring Services Laboratory, 1983

9 Land Use and Planning

Description of Baseline Environmental Conditions: The Refinery site is zoned by the City of El Segundo as Heavy Industrial (M-2). This is shown on Figure 6, a Zoning Map of the City of El Segundo. The areas surrounding the refinery can generally be characterized as a blend of heavy and light industrial, commercial, medium- and high-density residential, and industrial/ manufacturing. Land use at the refinery and in the surrounding vicinity is consistent with the City of El Segundo General Plan land use designations for the area. The Land Use element of the General Plan currently in force was adopted in December 1992, and no revisions regarding land use at the refinery have occurred since that time.

Analysis as to whether or not project activities would:

- a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect

Impact Analysis: No change in the land use plan, policy or change in zone will occur as a result of this project

Conclusion: This project will not result in any land use or zoning change

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b. Conflict with any applicable habitat conservation plan or natural community conservation plan

Impact Analysis: This project will not conflict with any habitat conservation plan or natural community conservation plan. This is an area of heavy industrial use and this project will have no effect.

Conclusion: This project will not conflict with any applicable habitat conservation plan or natural community conservation plan

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Krause, South Coast Air Quality Management District, September 29, 2005
City of El Segundo Planning Department 2005

WWW.elsegundo.org/departments/planning_and_safety/planning

10. Mineral Resources

Description of Baseline Environmental Conditions: This is an Oil Refinery covering one square mile. The refinery has been in operation since 1911. This project only involves a small portion of the refinery. No mineral resources will be impacted as a result of this project.

Analysis as to whether or not project activities would:

- a Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Impact Analysis: This will not occur because no mineral resources are involved in the groundwater, pore-gas or pore-liquid sampling activities.

Conclusion: The project will have no impact.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Impact Analysis: See item a above.

Conclusion: No impact.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Krause, South Coast Air Quality Management District, September 29, 2005.

WWW.elsegundo.org

11. Noise

Description of Baseline Environmental Conditions: This is an oil refinery covering one square mile. The refinery has been in operation since 1911. The refinery operates 24 hours per day, 7 days per week. Noise levels remain constant. The noisiest device at the refinery is the Alkylation Unit which may cause noise levels to 85 dBA. This would be the maximum noise level reached on the refinery. Less than one-half mile away is Los Angeles International Airport where noise levels typically exceed 100 dBA. Other noise sources include: the Scattergood power generating plant, the Los Angeles County Hyperion Municipal Wastewater Treatment Plant and traffic noise on Sepulveda Boulevard and El Segundo Boulevard.

Activities conducted at the landfarm involve environmental sampling of groundwater pore-water, soil gas and cap inspections. At the HWSTF and PCB Storage area involve container handling utilizing hand dollies, possibly a fork lift and one 2 to 5 ton truck. The maximum noise levels expected in conducting these activities is 45 dbAs.

Analysis as to whether or not project activities would:

- a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies

Impact Analysis: This will not occur because these activities create little or no noise. The groundwater monitoring well pumps are operated by compressed bottled air, the pore-liquid lysimeters are operated with a bicycle pump and pore gas is sampled using a SUMMA canister. The noise associated with the HWSTF and the PCB storage building truck load and unloading of containers, specifically 55-gallon drums using hand dolly and the lift gate on a stake bed or covered 5-ton truck. In rare instances, a fork lift may be employed. Maximum noise levels from these activities will not exceed 45 dbA. Activities at the HWSTF would occur for approximately 2 to 4 hours per month.

Conclusion: There will be no exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels

Impact Analysis: There will be no groundborne vibration or groundborne noise because all activities are powered manually or require the use of equipment incapable of causing these effects.

Conclusion: There is no possibility of this occurring.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- c. A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project

Impact Analysis: These activities occur either every 3 months or 6 months so there can be no permanent ambient noise level increase and beside, these activities are not noisy.

Conclusion: There will be no permanent noise increase.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

Impact Analysis: These activities, moving drums with a dolly, lifting lift gates and various samplings activities, are not noisy. The maximum expected noise level from these activities is 65 dbA.

Conclusion: There will be no substantial temporary increase in noise levels.

- ☐ Potentially Significant Impact

- ☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A Krause, South Coast Air Quality Management District, September 29, 2005

WWW.elsegundo.org

(see the new city ordinances link)

12. Population and Housing

Description of Baseline Environmental Conditions: This is a one-square mile parcel with the Pacific Ocean on the west side. The refinery is bounded by the city of El Segundo to the north and Manhattan Beach to the south. **These** communities are predominantly residential. This project will not change the population or housing demand in either of these communities. Figure 6 shows the City of El Segundo and the Chevron El Segundo Refinery location.

Analysis as to whether or not project activities would:

- a Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)

Impact Analysis: This project will result in no population growth, either directly or indirectly

Conclusion: There is no impact

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere

Impact Analysis: This will not occur. This project will not affect any existing dwellings, in any way. The site is industrial, not residential. The post-closure activities will not effect beyond the site boundaries.

Conclusion: No Impact

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- c Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere

Impact Analysis: See response to b

Conclusion: No impact

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A Krause, South Coast Air Quality Management District, September 29, 2005.

www.elsegundo.org (site contains US Census data)

13. Public Services

Description of Baseline Environmental Conditions: This project which includes groundwater sampling, soil pore gas sampling and soil pore liquid sampling continues the existing environmental and inspection activities. These activities are all conducted on site. The City of El Segundo has its own police force and fire department that may, at times, respond to an emergency at the refinery overall, however this project will not require any of those services. Schools and parks will not be affected.

Analysis as to whether or not project activities would:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:
- Fire protection - This project involves pore-gas, pore-liquid and groundwater sampling associated with the landfarm. At the HWSTF and the PCB Storage Building there are fire extinguishers. An on-site fire extinguisher will be used if necessary, for anything associated with sampling activities. If, in the very unlikely event that a larger fire should occur at either facility, the local fire department will be summoned.
 - Police protection – There is no anticipation of additional police services.
 - Schools – There will be no effect of schools. The nearest school is .7 miles from the site.
 - Parks- There will be no effect on parks.
 - Other public facilities – There is no anticipated any increase use of other public facilities.

Impact Analysis: This project will not require any additional or put any strain on any fire, police, schools, parks or other public services or facilities.

Conclusion: These public services or facilities will not be affected.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Kreuse, South Coast Air Quality Management District, September 29, 2005

WWW.elsegundo.org/depart/default.asp

All departments for the City of El Segundo including police, fire, parks and schools are listed at this site

14. Recreation

Description of Baseline Environmental Conditions: The Chevron El Segundo Refinery Facility occupies approximately one-square mile of level terrain in an urban/heavy industrial/residential setting. This is an industrial setting and there are no city parks or public swimming pools nearby. This actual project site is surrounded by the entire refinery. This project only involves sampling and inspection of the landfarm and operation of the HWSTF and PCB Building. No recreational facilities are involved or will be affected by this project.

Analysis as to whether or not project activities would:

- a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated

Impact Analysis: This will not occur because all activities are confined to the refinery and after ten years of conducting these same activities no effect to recreational facilities has occurred

Conclusion: There will be no impact on parks or other recreational facilities as a result of this project

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b. Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment

Impact Analysis: There will be no recreational facility associated with this project

Conclusion: No impact

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

www.elsegundo.org/ (This site list all parks and recreation for the City of El Segundo)

15. Transportation and Traffic

Description of Baseline Environmental Conditions: The sampling activities will result in no increase or decrease in traffic because the vehicle used in this project never leaves the site. The removal of material stored at the HWSTF and the PCB Storage building would involve approximately four truck trips per year. If, however, the HWSTF and the PCB Storage Build were fully utilized to their maximum permitted capacity, the total number of trucks in one year servicing these facilities would be as many as 35. No two trips would occur on the same day.

The hauling of hazardous waste would be to a Class I Landfill by a licensed waste hauler. Because the nearest facility is 130 miles away at the Kettleman Hills facility in Kern County, the truck would exit the Chevron facility heading east on El Segundo Boulevard. The truck would turn left onto Sepulveda Boulevard and head north. Approximate 2 miles north the truck would get onto the San Diego Freeway heading north. The average level of service for a 24-hour period for El Segundo Boulevard in 2005 was 62,500 vehicles. The 1-hour peak rate is 5,400 vehicles.

Analysis as to whether or not project activities would:

- a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)

Impact Analysis: There will be no substantial increase in traffic either from sampling and inspection activities at the landfarm or for transporting stored materials to and from the HWSTF and PCB Storage Building. The only vehicle traffic associated with these facilities are the courier service to pick samples up from environmental sampling semi-annually and approximately 4 truck trips annually from the HWSTF (almost exclusively) and PCB Storage Building.

Conclusion: There will be no impact on traffic on surrounding streets as a result of the project. Two additional vehicles during peak traffic would result in a 0.0185% increase.

If, however, the HWSTF and the PCB Storage Build were fully utilized to their maximum permitted capacity, the total number of trucks in one year servicing these facilities would be 35. If four trucks left these facilities on any given day and proceeded north to the Kettleman Hills facility, the increase in traffic would be 0.037%. If the four trucks left at the same time a sampling event was occurring at the landfarm and samples needed to be couriered to the analytical lab, the increase would be 0.046%.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.

Impact Analysis: Although there is vehicular traffic required for operation of the HWSTF, PCB storage Building and landfarm post closure activities, the level of increase over baseline is insignificant.

Conclusion: There will be not measurable increase in level of service or will any traffic congestion occur.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact Analysis: No change in street layout or vehicle use will occur as a result of this project.

Conclusion: There will be no change in streets or vehicles as a result of the project.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d. Result in inadequate emergency access.

Impact Analysis: The refinery has excellent emergency access to all areas. This project will not affect this.

Conclusion: This project will not affect any emergency access.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- e. Result in inadequate parking capacity.

Impact Analysis: There is adequate parking for all vehicles involved in this project.

Conclusion: No parking capacity will be affected as a result of this project and no additional parking will be required.

- ☐ Potentially Significant Impact

- ☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- f Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Impact Analysis: the proposed project will be constructed within the confines of an existing refinery and is not expected to conflict with adopted policies, plans, or programs supporting alternative transportation modes (e.g., bus turnouts, bicycle racks).

Conclusion: This project will have no impact on bus turnouts, bicycle lanes or racks. There will be no conflict with policies, plans, or programs supporting alternative transportation.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A Krause, South Coast Air Quality Management District, September 29, 2005

[http:// traffic-counts dot.ca gov/](http://traffic-counts.dot.ca.gov/)

16. Utilities and Service Systems

Description of Baseline Environmental Conditions: The Chevron El Segundo Refinery Facilities occupies approximately 640 acres of level terrain in an urban/heavy industrial/residential setting. Electricity is provided by the City of Los Angeles Department of Water and Power. Natural gas is provided by The Southern California Gas Company. Water needs are met by the City of El Segundo. Sewage is disposed through the County Sanitation Districts of Los Angeles County (LACSD) and receives secondary treatment at the Hyperion Water Reclamation Plant.

Analysis as to whether or not project activities would:

- a Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board

Impact Analysis: The ChevronTexaco refinery does utilize off site waste water treatment facilities, however this project would not require off-site waste water treatment.

Conclusion: This project would not exceed any wastewater treatment requirements.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

- b Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact Analysis: No new or expanded storm water facilities will be required. There will be no change in the site topography.

Conclusion: This project will not require new waste water treatment.

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated

- ☐ Less Than Significant Impact
☒ No Impact

- c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

Impact Analysis: Any water required to complete this project will either be brought on-site by the contractor or existing on-site water service will be used. Either way no additional water service will be required.

Conclusion: No additional water resources are required

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Impact Analysis: The project has a requirement for a small amount of water; therefore no determination by a waste water provider is necessary

Conclusion: No additional water resources are required

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments

Impact Analysis: The project is the operation of an on-site wastewater treatment system and under the jurisdiction of the LACSD; therefore no determination by a waste water provider is necessary

Conclusion: No additional wastewater resources are required

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs

Impact Analysis: No landfill will be required because no waste will be created as a result of this project

Conclusion: All hazardous waste from the HWSTF and PCB Storage Building that is hazardous will be disposed off-site as such. The small volume will have no impact on over capacity of such off site facilities

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

- g. Comply with federal, state, and local statutes and regulations related to solid waste

Impact Analysis: This project will create no solid waste and will comply with all federal, state and local statutes and regulations

Conclusion: This project will comply with federal, state, and local statutes and regulations related to solid waste

- ☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used: HWSTF & PCB Storage Building Operating Plan, Chevron Products Company, December 11, 2006

CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A. Krause, South Coast Air Quality Management District, September 29, 2005

http://www.sce.com/NR/rdonlyres/FAF1EDF8-B2B3-45BC-979D-A8B6F596BDCD/0/QF_Status_Report.pdf

www.elsegundo.org

(see link to utilities, specifically water service)

Finding Of De Minimis Impact To Fish, Wildlife And Habitat (Optional)¹

The following provides substantial evidence as to why the project will have no potential for adverse effect on the listed resources as defined by section 711.2 of the Fish and Game Code:

a Riparian land, rivers, streams, watercourse, and wetlands under state and federal jurisdiction

Discussion: There is no surface water directly associated with the facility and the project will not result in run-off of site constituents from this site which could affect distant wetlands, riparian land, rivers, streams or other water courses. The nearest surface water body is the Pacific Ocean which is 0.5 miles away

Finding: ☒ No potential for adverse effect

b Native and non-native plant life and the soil required to sustain habitat for fish and wildlife

Discussion: The project relates to an urban area and there is no habitat associated with it

Finding: ☒ No potential for adverse effect

c Rare and unique plant life and ecological community's dependent on plant life

Discussion: The site is paved and there is no rare or unique plant life. A thorough review of the California Department of Fish and Game's web was conducted. The following animals were researched: The El Segundo Blue Butterfly (*Euphilotes battoides allyni*), the coastal buckwheat plant (*Eriogonum parvifolium*), the Pacific pocket mouse (*Perognathus longimembris pacificus*) and the beach spectaclepod (*Dithyrea maritime*). Based on list reviewed, determination was made that there are no threatened or endangered plants or animals

Finding: ☒ No potential for adverse effect

d Listed threatened and endangered plant and animals and the habitat in which they are believed to reside

Discussion: There is no threatened or endangered plants or animals or habitat in which they are believed to reside at this site.

Finding: ☒ No potential for adverse effect

¹ Complete only if a Finding of De Minimis Impact to fish, wildlife and habitat is proposed in lieu of payment of the Department of Fish and Game Notice of Determination filing fee required pursuant to section 711.4 of the Fish and Game Code. A finding of "no potential adverse effect" must be made to satisfy the requirements for the Finding of De Minimis Impact as required by title 14, California Code of Regulations, section 753.5.

- d. All species of plant or animals as listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulation adopted there under

Discussion: There is no fish or wildlife listed as protected or identified for special management at this site.

Finding: ☒ No potential for adverse effect

- e. All marine and terrestrial species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside.

Discussion: This will not occur because there are no marine species and there are no terrestrial species located at the facility site that would be under the jurisdiction of the California Department of Fish and Game.

Finding: ☒ No potential for adverse effect

- f. All air and water resources the degradation of which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air and water.

Discussion: There is no aquatic life on or near the site. However, the Pacific Ocean is located 800 feet beyond the western boundary of the entire site. The HWSTF and PCB Storage building are about 2600 feet or one-half mile from the ocean and no activity associated with these Facilities will affect the ocean. This site is void of any water environment. Additionally planned activities will not affect air to the degree that would be harmful.

Finding: ☒ No potential for adverse effect

Mandatory Findings of Significance

Based on evidence provided in this Initial Study, DTSC makes the following findings:

- a. The project ☐ has ☒ does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

The proposed project is not expected to have adverse impacts on special-status animal and plant species, on other biological resources (riparian habitats, wetlands, or migratory corridors); or conflicts with ordinances or conservation plans.

- b. The project ☐ has ☒ does not have impacts that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

The proposed project will not cause cumulative impacts depending on other projects that are likely to occur concurrently with or subsequent to the proposed project.

- c. The project ☐ has ☒ does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

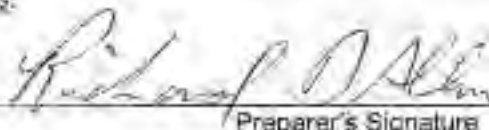
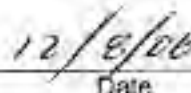
The proposed project will not cause adverse effects on human beings. Air quality, hazards and hazardous materials, hydrology and water quality, noise, solid/hazardous waste, and transportation/traffic will not be adversely affected as a result of the proposed project.

Determination of Appropriate Environmental Document:

Based on evidence provided in this Initial Study, DTSC makes the following determination:

- ☒ The proposed project COULD NOT HAVE a significant effect on the environment. A Negative Declaration will be prepared.
- ☐ The proposed project COULD HAVE a significant effect on the environment. However, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A Mitigated Negative Declaration will be prepared.
- ☐ The proposed project MAY HAVE a significant effect on the environment. An Environmental Impact Report is required.
- ☐ The proposed project MAY HAVE a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An Environmental Impact Report is required, but it must analyze only the effects that remain to be addressed.
- ☐ The proposed project COULD HAVE a significant effect on the environment. However, all potentially significant effects (a) have been analyzed adequately in an earlier Environmental Impact Report or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier Environmental Impact Report or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, nothing further is required.

Approvals:


Preparer's Signature
DateRichard D. Allen
Preparer's NameHazardous Substances Engineer
Preparer's Title(818) 551-2924
Phone #
Branch Chief Signature
DateJose Kou
Branch Chief NameSupervising Hazardous Substances
Engineer II
Branch Chief Title(818) 551-2920
Phone #

ATTACHEMENT A

REFERENCES

- 1 HWSTF & PCB Storage Building Operating Plan, ChevronTexaco Products Company, December 11, 2006
- 2 CEQA Environmental Document prepared for Chevron Products El Segundo Refiner Heavy Crude Project, Michael A Krause, South Coast Air Quality Management District, September 29, 2005
- 3 <http://www.elsegundo.org>
- 4 South Coast Air Quality Management District, 2003, Final 2003 Air Quality Management Plan
- 5 Division of Mines and Geology Special Publication 42
- 6 <http://traffic-counts.dot.ca.gov/>
- 7 U.S. Environmental Protection Agency Test Methods for Evaluating Solid Waste SW846, Third Edition, Update III Revision 2, December 1996
- 8 U.S. Environmental Protection Agency Methods for Chemical Analysis of Water and Waste, Environmental Monitoring Services Laboratory, 1983
- 9 City of El Segundo Planning Department 2005
- 10 California Natural Diversity Database, Biogeographic Data Branch, Department of Fish and Game, Version Date: October 3, 2006
- 11 http://www.sce.com/NR/rdonlyres/FAF1EDF8-B2B3-45BC-979D-A8B6F596BDCD/0/QF_Status_Report.pdf

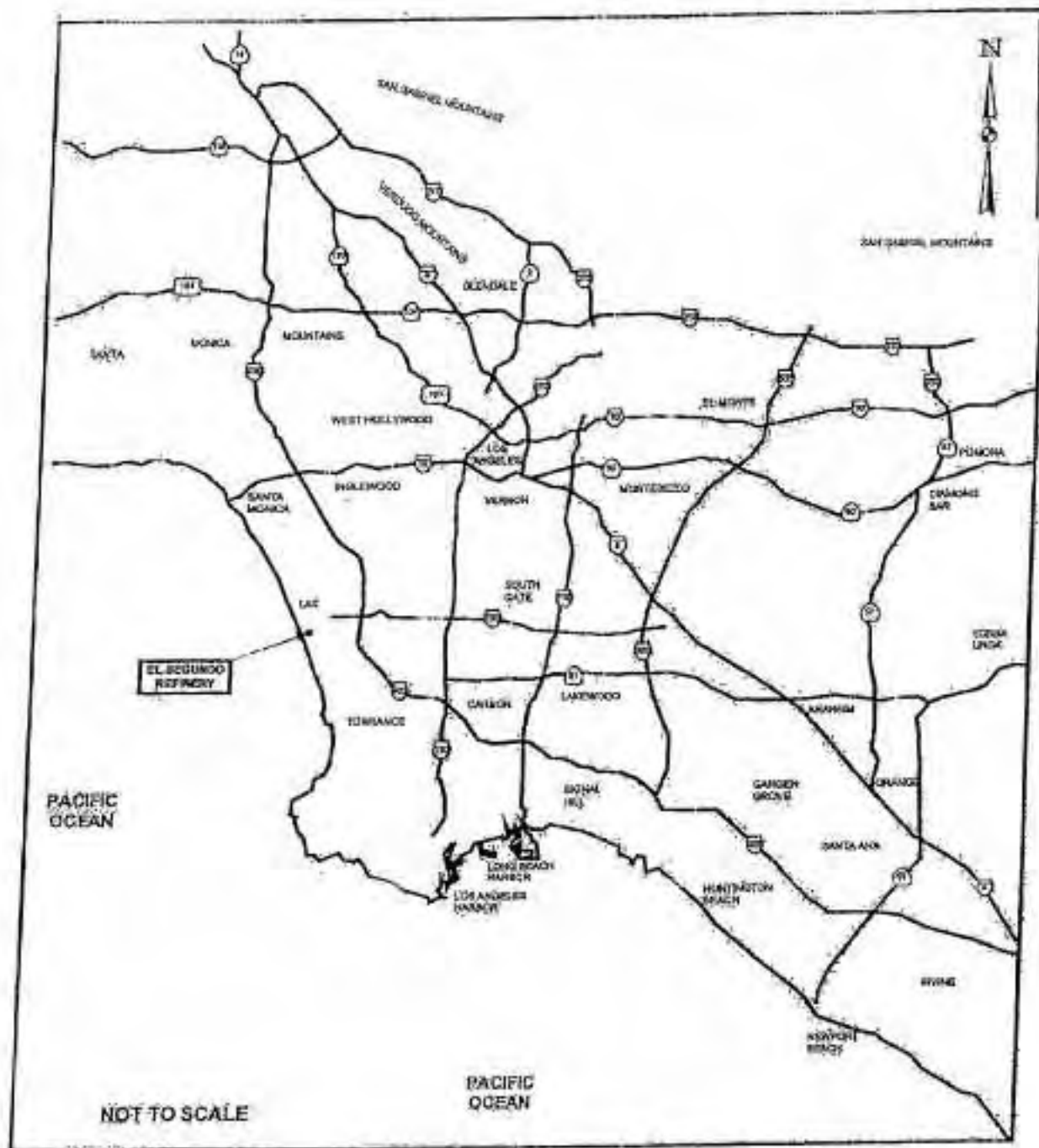
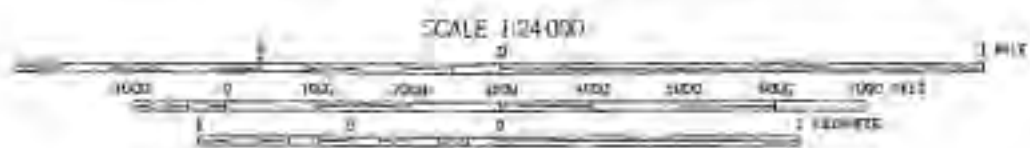
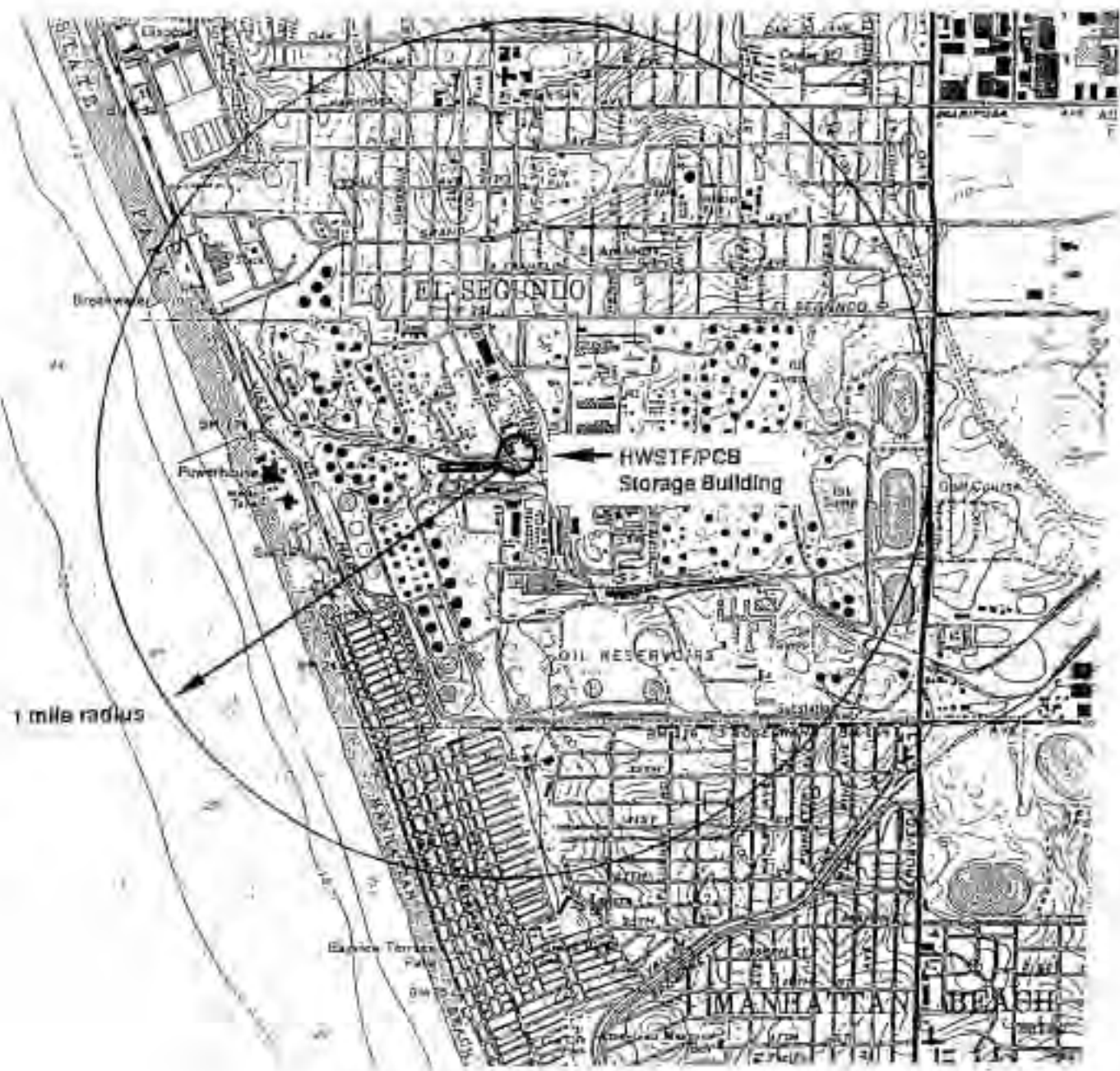


Figure | Regional Location Map



CONTOUR INTERVAL 10 FEET
 DOTTED LINES REPRESENT 5-FOOT CONTOURS
 NATIONAL GEODETIC VERTICAL DATUM OF 1929
 DEPTH CURVES AND SOUNDINGS IN FEET-DATUM IS MEAN LOWER LOW WATER
 THE RELATIONSHIP BETWEEN THE TIDAL DATUMS IS VARIABLE
 SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
 THE MEAN RANGE OF TIDE IS APPROXIMATELY 4 FEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



ROAD CLASSIFICATION
 Freeway —————
 Major Road —————
 Light duty —————
 Unimproved dirt —————
 Interstate Route —————
 Gravel Road —————

U.S.G.S. TOPOGRAPHIC MAP FIGURE 2

VENICE, CALIF.
 N3352 5-W11822 5/7 5
 1964
 PHOTOREVISED 1981

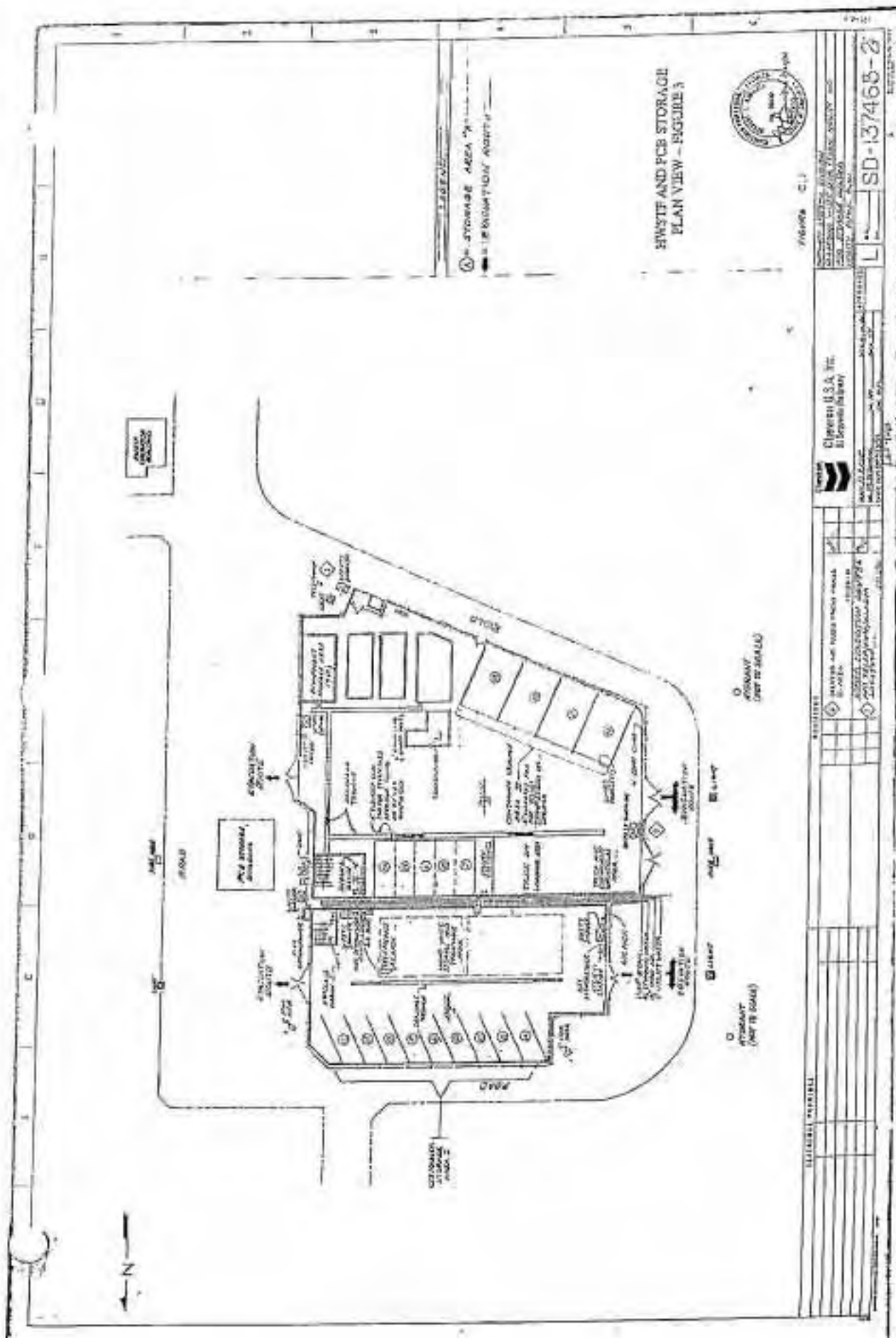


Figure 3

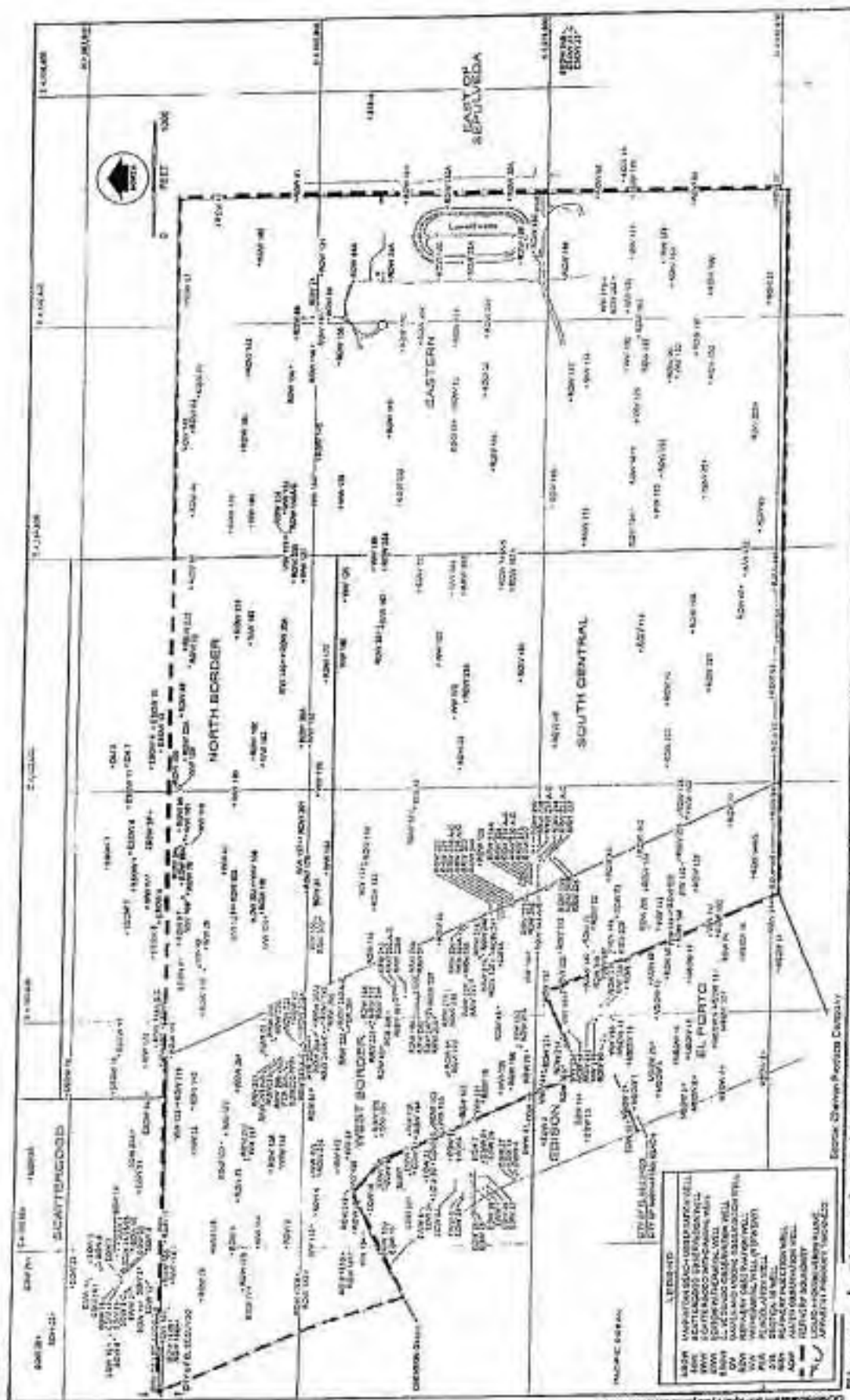


Figure 4 Location of the Landfarm within ChevronTexaco El Segundo Refinery

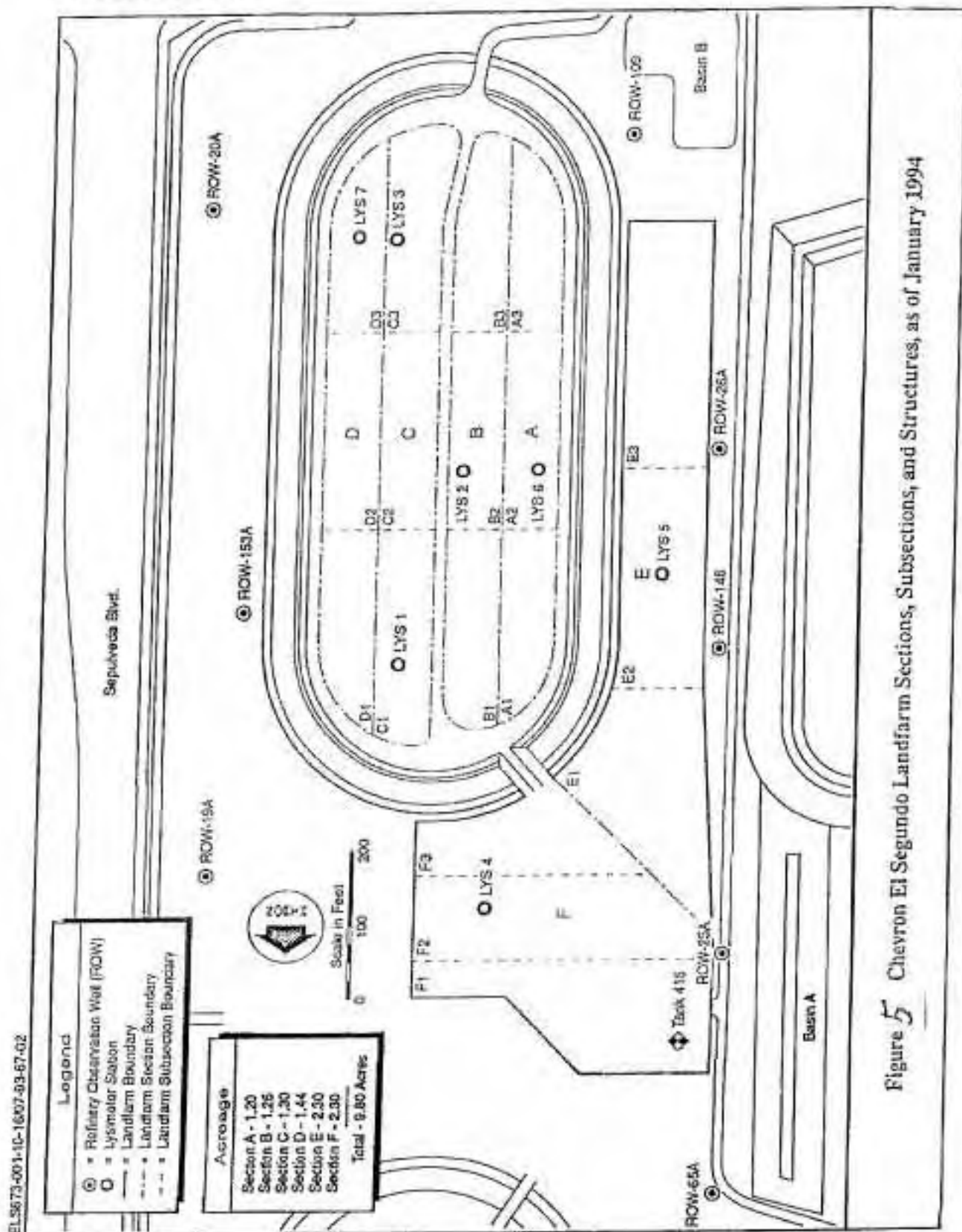


Figure 5 Chevron El Segundo Landfarm Sections, Subsections, and Structures, as of January 1994

